



CABLE MODEM QUICK START

Package Contents

- Cable Modem
- Modem Stand
- Power Cube
- Ethernet Cable

System Requirements

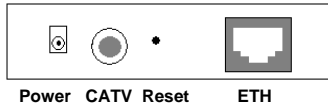
- You need to connect the cable modem to a cable modem service that uses any of the popular DOCSIS standards – 3.0, 2.0, 1.1, or 1.0. If you need to get cable modem service, please speak with your cable service provider.
- You need to connect a computer or router to the cable modem using an Ethernet cable. The computer can be a Windows, Macintosh, or Linux computer. The router must have one or more Ethernet ports, and may include wireless capability. Instructions for making this connection are below.

Locate Your Ethernet MAC Address

Your cable company may ask for your cable modem's MAC address. This is on the bottom of your cable modem. You may want to write it down here for quick reference:

Your cable service provider may provide a cable modem starter kit

Some cable service providers supply a cable modem starter kit that can be useful when you install your cable modem. The kit may include a coaxial cable for connecting between a wall jack and your cable modem. (These are also available at most electronics retailers.) The kit will include instructions, and may also include a CD with software. If you receive a kit like this, we recommend that you read the kit's instructions and use them to install your Zoom cable modem. This cable modem is DOCSIS 3.0 certified by CableLabs, and connects like a normal cable modem. You will need to plug in the cable modem's power cube, connect to cable modem service using a coaxial cable, and connect the included Ethernet cable between the cable modem and a computer or router.



How to connect to a computer if you don't have a cable company's starter kit

- 1 Make sure that your computer is on.
- 2 Plug one end of the Ethernet cable into the modem's **ETH** jack and plug the other end into your computer's Ethernet jack. The **LINK** light of the modem should be lit to show the Ethernet connection.
- 3 Connect the modem to a coaxial cable for the cable service. The cable service is carried on the same cables and connectors as your cable TV service.
 - You can connect a coaxial cable between an open cable service wall jack and the cable modem. (If no wall jack is open, you can use a coaxial T connector.)
 - Alternatively, there may already be a coaxial cable that is connected to service and that has an open end for connecting to the cable modem.
- 4 Plug the power cube into an outlet and then into the modem's **POWER** jack. It may take several minutes for the modem to register with the cable system. If the modem's front panel STATUS, US, and DS lights do not stay on steady after a reasonable amount of time, go to Troubleshooting.
- 5 You should follow any directions (including instructions for any software installation) that your cable provider has given to you. Your cable company may instruct you to tell them your cable modem's MAC address after you complete the hardware installation.
- 6 Now that you have installed your Zoom cable modem and it has synchronized itself with the cable network, your cable modem can connect you to the Internet. Open your browser and go to a familiar Web site to check that the cable modem is working.
Congratulations! Installation is complete.

How to connect your cable modem to a router (not a computer)

- 1 The router should not be plugged in or powered up. If it is, unplug it.
- 2 Plug one end of the Ethernet cable into the modem's **ETH** jack and the other end into the router's WAN Ethernet jack, typically labelled WAN or Internet.
- 3 Connect the modem to the cable outlet.
 - **If you have a wall outlet cable jack:** Connect one end of the coaxial cable to the modem's **CABLE** connector and connect the other end to the wall jack.
 - **If you do not have a wall jack:** You should have coaxial cable entering your house close to where you want to locate your cable modem. Connect the end of this cable to the modem's **CABLE** connector.

- 4 Plug the modem's power cube into an outlet and then into the modem's **POWER** jack. It may take several minutes for the modem to register with the cable system. If the modem's front panel STATUS, US, and DS lights do not stay on steady after a reasonable amount of time, go to Troubleshooting.
- 5 Power-up the router. Wait for the router to complete its power-up sequence. The modem's **LINK** light should come on.
- 6 You may need to restart some or all of the computers attached to the router.
- 7 You should follow any directions that your cable provider has given to you. Your cable company may instruct you to tell them your cable modem's MAC address after you complete the hardware installation.
- 8 Using a computer connected to the router, open the computer's browser and go to a website to check that the connection between your cable modem and router is working properly.

Note: If you have a problem connecting to the router, please test the cable connection by connecting the cable modem directly to a PC by following the instructions in the previous section. If the cable modem worked properly when connected directly your computer, most likely the problem is caused by the router's configuration or installation. Check your router's documentation for help.

Please note the following:

- You can position the cable modem horizontally or vertically. The vertical position benefits from the modem stand.
- Do not block the modem vents in any way.
- Do not place the modem near a heating or air conditioning duct, in direct sunlight, or anywhere susceptible to drastic temperature changes.

Troubleshooting

Your Zoom cable modem has several lights on its front panel to help you monitor the modem's status.

Light Name	Mode	Status
POWER	Solid	Power is on.
DS (downstream)	Blinking	Modem is establishing a connection from the Internet to the computer.
	Solid	Connection from the computer to the Internet is established.
	Dark	Not scanning.
US (upstream)	Blinking	Modem is establishing a connection from the computer to the Internet.
	Solid	Connection from the computer to the Internet is established.
	Dark	Not scanning.
STATUS	Blinking	Modem is establishing a connection to the cable provider.
	Solid	Modem connection to the cable provider is established.
LINK	Blinking	Data is flowing between the computer and the Internet.
	Solid	Powered-up modem is connected to LAN device (e.g. computer, router).

Problem:

I cannot access my Internet service or send or receive email.

- Solution:** All the modem's front panel lights—**LINK**, **STATUS**, **US** (upstream), **DS** (downstream), and **POWER**—must be solidly lit before your modem will let you connect to the Internet. If they are not:
- Check all modem connections (power, Ethernet, and cable modem line).
 - Unplug your cable modem and then plug it back in.
 - Restart your computer.
 - Check to see that your cable TV is working.
 - Check with your cable service provider to make sure that high speed access is available and running.
 - In rare instances, the cable signal may be weak or noisy. If this is the case, call your cable service provider.
 - If you are using your PC's Ethernet port, check that this port is functioning correctly. If you are using wireless, check that your wireless connection is functioning correctly. Refer to its documentation if necessary.
 - Check that your Web browser is configured correctly. It should be set to use a network connection (this might be called a Local Area Network or broadband connection).
 - Check that your computer's network settings are configured correctly. A Windows computer should have a local area connection that should normally be Internet Protocol version 4, Internet Protocol version 6, or TCP/IP; not AOL, Dial-up, or Adapter. A Macintosh computer should be configured for Built-in Ethernet, and TCP/IP should be set to Using DHCP.

Problem:

I have connected a router to the cable modem but cannot access the Internet or send or receive email.

Solution:

- Connect the cable modem directly to a PC following the instructions above. If the cable modem works properly when connected directly to your computer, most likely the problem is caused by the router's configuration or installation.
- First try shutting down and restarting each computer connected to the router. Power cycle your cable modem and allow time for it to resynchronize with the cable system.
- You may also need to check that the DHCP client on the router's WAN port is enabled. If you need help, look in your router's manual or contact your router manufacturer.
- If that does not solve the problem, you may need to contact your cable service provider and give them the MAC address of the router's WAN port.

Getting Help

If you need assistance, please go to www.zoom.com and select Technical Support for help via our Web SmartFacts system, email or phone.

Safety Issues & Warnings

WARNING: Risk of electric shock. Do not expose to water or moisture.

- The Broadband Residential Cable Modem is a high-performance communications device designed for home and office environments.
- Do **NOT** use the cable modem outdoors. Keep the cable modem in an environment that is between 0°C and 40°C (between 32°F and 104°F).
- To avoid overheating the cable modem, do **NOT** place any object on top of the cable modem.
- Do not restrict the flow of air around the cable modem.
- The manufacturer assumes no liabilities for damage caused by any improper use of the cable modem.

Disclaimer

Zoom Telephonics, Inc. (hereinafter "Zoom") assumes no liabilities with respect to the contents of this document. Zoom also reserves the right to revise this document or update occasionally the content hereof without any obligation to notify any person of such revisions or amendments. Specifications subject to change without notice.

Regulatory Information

FCC

This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference and,
- (2) This device must accept any interference received, including interference that may cause undesired operation.

UL Listing

This product is UL-Listed and complies with all applicable electrical and fire safety requirements.

Limited Warranty

Zoom Telephonics, Inc. (hereinafter "Zoom") warrants this product against defects in material and workmanship for a warranty period of 2 years. This warranty applies to the original end-user purchaser.

For all Zoom products other than software, Zoom will, solely at its option, repair or replace this product with a functionally equivalent new or factory-reconditioned product during the warranty period. The consumer will deliver the product to Zoom. All transportation risks and costs in connection with this warranty service are the responsibility of the consumer.

Zoom will replace software at no charge if there is a defect in materials or workmanship for a period of 30 days from date of original retail purchase, provided the defective software is returned to Zoom. Shipments from Zoom will normally be via U.S. Mail. Software products supplied by Zoom are sold "as is," without warranty, either expressed or implied, as to function, application, merchantability, performance, and quality.

Zoom is not responsible for incidental or consequential damages, and is not responsible for damages resulting from the breach of any expressed or implied warranty. Zoom is not responsible for any costs of recovering, reprogramming, or reproducing any programs or data stored or used with the Zoom products, damage to property, and to the extent permitted by law, damages for personal injury.

This warranty is in lieu of all other warranties, expressed or implied. We do not assume or authorize assumption for us of any other warranty expressed or implied. Some states and countries do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusions may not apply to you.

This warranty does not apply if the Zoom product has been damaged by accident, abuse, lightning or other natural disasters, misuse or misapplication, or if it has been modified without the written permission of Zoom, or if any serial number has been removed or defaced.

This warranty shall not be applicable to the extent that any provisions of this warranty are prohibited by any federal, state, or municipal law that cannot be preempted. This warranty gives you specific legal rights, and you may also have other rights that vary from state to state or country to country.